

ABSTRACT OF THE DISCLOSURE

A method for controlling a flow of packet data in a memory management unit of a network switch fabric is disclosed. A first portion of a data packet is received at a port on an ingress bus ring of the network switch fabric. A class of service for the data packet is determined based on the first portion and the portion is stored in a packer RAM of the port based on the class of service. Subsequent portions of the data packet are stored in the packer RAM. Once the predetermined number of portions have been received, the predetermined number of portions is sent to a packet pool RAM. A reference pointer to a first predetermined number of portions is sent to a transaction queue once an end of packet is detected and an egress scheduler detects a presence of a ready packet in the transaction queue and notifies an unpacker of the ready packet. The unpacker puts the ready packet into a FIFO and the ready packet is sent to an ingress/egress module.